

BRANFORD ELECTRIC RAILWAY JOURNAL



Brooklyn 1792 prepares to depart on Annual Meeting Day, Nov 14, 2015. (R. Ryan)

Brooklyn 1792

When approximately 30 members took their seats on car 1792 on Annual Meeting day (November 14th) for a ride down the line, they were doing something that no passenger had done in that car since 1923! Restored to its BRT passenger car appearance and operating once again after being twice flooded, thanks to the ongoing FEMA recovery program, these privileged members enjoyed the happy conclusion to a long saga.

The Nassau Electric Railroad

The word "Nassau" is a major component in our story, so let us trace its origins. During the 1890s, an effort was being made to create what we now consider the Greater City of New York comprising its five boroughs. At this time, the land mass of Long Island was divided into just three counties: Kings (which became the Borough of Brooklyn), Suffolk (which was not joined to New York City) and Queens. The latter consisted of the Towns of Jamaica, Long Island City, Flushing, Newtown, Hempstead, Oyster Bay and North Hempstead. A referendum conducted in 1894 had mixed results. While the first four towns above agreed to become the Borough of Queens (effective January 1, 1898), the latter 3 declined. On January 1, 1899 these towns became part of a newly-created county called Nassau.

What to call this new county was the subject of debate during the

1890s. The name "Nassau" was inspired from the colonial history of Long Island. During the time of King William and Queen Mary of England, in the late 1600s, the entire island was known as Nassau, in deference to the aristocratic House of Orange-Nassau from which William was descended.

On March 13th, 1893 one Patrick Flynn incorporated the Nassau Electric Railroad Co. as a holding company for several streetcar lines that he had developed in Brooklyn during the previous few years. The NERR may have had intentions to operate in the still nebulous Nassau County but it never did so.

Coincidentally, on the same day, a company known as the Long Island Traction Co. was incorporated. This should not be confused with the New York & Long Island Traction Co. which comes up later in our story. Although the backers were all Brooklyn streetcar men, it was a Virginia corporation for purposes of evading certain regulations. The L.I. Traction began to consolidate railway lines in Brooklyn through purchase and/or lease arrangements. However, as a result of the lingering effects of the Panic of 1893 and labor unrest, the L.I. Traction entered receivership and was re-organized on January 18th, 1896 as the Brooklyn Rapid Transit Co. The BRT continued acquisition

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Membership News

New Members

Let's welcome the following new members, who have joined since our last report, to our museum community: Felicity Alexander, Lucas Alexander, Nolan Bath, Bruce T. Benson, Miles Blount, Nancy Brown, Tristan Brown, AJ Cooper, Mary Cooper, Samantha Cooper, Carol W Ferraro, Joseph J Ferraro Jr, Elizabeth Marie Johansmeyer, Leonard Khandros, Jeffrey Marbury, Dan Mongillo, Nancy Morse, Keegan Murray, Kristy Murray, Richard Neagle, Jerry Otrin, Philip Pouliot, Ryan Pratt, Evelyn Santoro, Eric N. Shamsid-Deen, Ken Sittnick, Bibiana Isabella Solis, Giovanni Solis, Leidy Bibiana Solis, Victoria Grace Solis, Alexandra Tabora, Jonathan Ulintz Mosovich, Quinn Ulintz Mosovich, Sue Ulintz Mosovich, Rena C Winton, Shaun Robert Winton.

Our membership roster now contains 1,193 individuals, 201 of which did not pay 2015 dues and are about to be dropped.

If your mailing label says 2014, this is your LAST ISSUE!

Please note that the museum's membership cycle is not the same as the calendar year, but coincides roughly with the start of our operating season. Your 2015 membership continues to be in good standing until May 1st, 2016. Please be on the lookout for your membership renewal letter which should arrive in the mail during March. If you have already pre-paid your 2016 dues, your 2016 membership cards will be enclosed in that mailing.

Museum Director

The museum hired a new Museum Director who began his position on October 26th, 2015. Shaun Winton stood out among 22 highly qualified applicants. He earned his Bachelor's in Public History from Grand Valley State University and is currently completing a Master's Degree at Central Connecticut University, where his specialty is 20th century transportation history.

When Shaun sat down at his desk, which is in the 14 River Street

building across the street from Sprague Station, it was not his first time at the museum. During the summer of 2015, he completed an internship in conjunction with his graduate studies. He assisted with museum programming and archives, preparing finding aids for boxes and boxes of previously uncataloged material.

He also brought an impressive C.V. including work at the Veterans' History Project and the Library of Congress, and has presented a paper at the National Conference for Public History. His background includes fund-raising and social media marketing, which is increasingly important for organizations such as ours.

During the summer, Shaun worked with Nathan, the previous director. Although both grew up in different parts of Michigan, Shaun was quick to point out that his family has since relocated, and he has no reason or desire to move back to that state! Shaun currently resides in New Britain with his wife Rena, a K-12 school teacher.

Nathan worked with Shaun over the phone and that new-fangled internet thing, to effect a smooth transition. General Manager Wayne Sandford would also like to say "Thank You!" to all those who helped out during the three months that the position was vacant: Peter Callahan coordinated crewing, Carmela Gaetano processed dues and donations payments, John Proto handled charter bookings, and David Cohen stepped up his already frantic schedule to fill in the remaining blanks.



Annual Meeting

At the Annual Meeting on November 14th, the highlight of the morning was the introduction of Brooklyn 1792 and the re-introduction of Montreal 2001. Both of these cars were repaired after flood damage suffered in the two hurricanes. Shortly after noon, members gathered at the Benziger Memorial Garden for the annual reading of the names of deceased members who helped to shape and grow the museum. The business meeting was once again held at the Church on the East Haven Green. President Hakner called the meeting to order shortly after 1PM. After lengthy slide presentations by Wayne Sandford and Jeff Hakner on operations, railway maintenance, collections maintenance, library/archives, special events, Elevating the Collection and the ongoing FEMA-subsidized motor repair program, the matter of

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the bylaws was on the agenda.

There were 51 voting members signed in. The proposed re-stated Certification of Incorporation was ratified unanimously, and the proposed amended and re-stated Bylaws were approved by 46-4-1. These documents have taken effect on January 1st, 2016, and can be downloaded by members using their members-only web login at:

<http://www.bera.org/restricted/bylaws>

The new bylaws and certificate were the result of two years of hard work by the Bylaws and Governance Committee consisting of Rob Worrell (chair), Jeff Hakner, Thurston Clark, Mike Schreiber, Charlie Dennis and Wayne Sandford. The documents were drafted and reviewed by attorneys provided to the museum without fee via the Pro-Bono Partnership of Connecticut. These documents now reflect best and up-to-date practices in non-profit governance within the laws of the State of Connecticut.

The nominating committee, consisting this year of Bill Wall (chair), Lou Levinson, James Boylan and Jeff Hakner, had presented the following slate at the September Board Meeting: President - Wayne Sandford, Vice President - Ron Parente, Trustees - John Aurelius, Carmela Gaetano, Judy Sittnick. There were no seconded nominations from the floor, and thus the slate was elected by acclamation. Because of the bylaws changes, this was the last Annual Meeting at which the President and Vice-President were directly elected by the membership (these officerships are now appointed by the Board, consistent with the other corporate officers). The trustees elected began their 3-year terms on January 1. At the meeting, Board Chair Lou Levinson thanked Thurston Clark and Wayne Sandford for their service of 6 consecutive years on the Board. Per the term-limit bylaw, they were therefore not eligible to run this year.

Following a buffet dinner, our special presenter was Peter Rinaldi. You may recall his name from the previous issue as the Port Authority engineering manager who was in charge of the Ground Zero recovery operations and who saved PATH cars 745 and 143. Peter gave a behind-the-scenes slide show not only of the recovery operation, but the rebuilding that followed.

ERA Collection

The collection that was formerly held by the Electric Railroaders' Association (ERA) at their Sprague Library was transferred to the museum's custody in 2014 when the ERA was forced to

vacate their space in Grand Central Terminal. Now that the 14 River Street building is functioning, the collection which had been held in climate-controlled dead storage was brought here in early November. Nearly 300 boxes arrived. By January, all of the boxes had been unpacked, sorted and shelved. About one third of the material was duplicate and will eventually be either gifted to other museums or sold to raise money to support the archives program. While there was some overlap, the addition of the ERA material to ours gives us a very strong collection of reports, contracts, maps, blueprints, periodicals and commercially published books in the electric railway field.

Operator Training

It will be held later this year and hopefully catch better weather. Class dates are April 2, 9, 16 and May 7 & 14, from 9 AM to 4:30 PM each day. This comprehensive course teaches volunteers how to operate the trolley cars, the rules and characteristics of our museum railway, and how to present history to our visitors in an enjoyable way. Please sign up soon: space is very limited. Contact the museum office via email office@shorelinetrolley.org or phone (203) 467-6927. To attend the class, you must be a museum member in good standing. A \$65 fee covers all training materials and includes a hat badge and name tag upon completion.

Members' Day & calendar

Save the date! Members' Day will be Saturday, April 30th. In addition to your old favorites, the museum will be showcasing cars that have returned to operation via the flood recovery program. The museum's 2016 operating calendar has been finalized. An important change is that our daily operations season will start later. We will be open on Memorial Day, but then weekends only until June 20th. Daily ops will continue through Labor Day. The museum will be open weekends in May and September-December, and additional special event days: Easter Bunny Mar 19/20/25/26, Superhero Day Jun 21, Guest Operator May 14/15, Jun 18/19, Jul 16/17, Aug 20/21, Sep 17/18, Founders' Day Jul 30, Trolley Reading program Tuesdays Jul/Aug, Fire Safety Day Oct 1, Haunted Isle Sep 30, Oct 1, 7, 8, 14, 15, 21, 22, 28, 29, Pumpkin Patch Oct 15, 16, 22, 23, 29, 30, Scout Merit Badge workshop Nov 5 & 19, Santa Nov 25, 26, 27, Dec 2, 3, 4, 9, 10, 11, 16, 17, 18. Please refer to the museum's public programs web site at www.shorelinetrolley.org for complete schedule details.



L: Wayne Sandford presents at Annual Meeting. (J.Hakner) R: Our crew of high school community service interns was of tremendous assistance during the special event season. (l-r) Chris DeLuca, Shivam Patel, Christian Swett, Dylan Swett, Alyssa Wotapka. (C.Emerson)

Recovery Update

Shortly after the last issue went to press, another milestone in the flood recovery program was reached as car 865 was given a successful test run. We hope to feature this car on Members' Day 2016. Additional work will be required, such as the addition of pole interlocks and overhaul of the flood-damaged air compressor, before the car can be reliably used in regular passenger service for the first time since it came to the museum in 1948. This test run capped off a nearly two-decades long restoration project.

Also in the Connecticut Company fleet, parlor car 500 came into the shop at the end of 2015. This was a particularly difficult car from which to extract the motors, but they are now out to the motor overhaul shop. Support of museum members who joined the "500 Club" by upgrading their membership to the Benefactor level was an essential part of establishing the funding for this significant car.

Motors for Connecticut Co. open 1425 are expected back from the motor shop any day now. These will be tested here and then sent to the Philadelphia-area company which is doing the truck overhaul.

The overhauled motors for Toronto 2898 are back. The air compressor has just been removed for flood repair. Now that the museum's claim under the Sandy disaster has also been approved, we will be able to repair additional compressors, bearings, switch groups, air brake valves and spare parts that were flooded above and beyond the damage caused by Irene. This DH-16 compressor and the National B-1 compressor from Brooklyn 9137 are the first under this part of the disaster remediation program. As with the traction motor overhauls, FEMA reimburses the museum for 75% of the actual costs, and the museum must pay the 25%.

We're pleased to announce that the outstanding response to the museum's year-end annual fund drive, plus the receipt of a multi-year grant from the Community Foundation of Greater New Haven, has secured the funding needed to tackle additional projects during 2016. We have tentatively identified the following cars: 2350, 316, 220, 61 to be started in 2016, in addition to S-36, 709 and 1911 which have car-specific donor-sponsorship funds. We're also pleased to announce additional car-specific sponsorships of 3662 and 884 which were received at the end of the year. Because of the very congested shop schedule, these cars are more likely for 2017. A set of shop trucks will soon be ready for car 4573, after which the wheel truing can be done and the car can be re-assembled with its previously overhauled motors (compressor work is also needed). Car 1001 continues to await the construction of the new pit track on 94 to enable the potentially long-term repair work on its control system.

In summary, 2015 has been a very productive year as our collection's flood damage is remediated. Cars 302, 2001, 1792, 9137 and 865 were all completed, while cars 1425, 2898 and 500 were begun.

Additional technical details of some of these projects appear in the departmental reports on page 5-6.



ABOVE: (l-r) George Papuga, John Koella, Denny Pacelli. John began the 865 restoration project in the late 1990s. George completed the body work and Denny handled the motor removal and re-installation with new axle bearings. (R. Addil) BELOW: John pauses the car inbound just past the Stony Creek trestle, then is seen passing through notch 3 on the controller as he ascends the grade during a rainy test run on December 23. (S. Winton)



Track

In addition to the Elevating the Collection activity described elsewhere in this issue, missing bolts were replaced at Alex Switch and several ties were re-spiked. "Around back" on the leads for the shop, Barn 7 and Barn 6 leading to the upgraded run-around track, numerous switch ties were replaced (all of these ties are over 35-45 years old and starting to show their age). Periodic lubrication of the switches, frogs and guard rails was done, and the seasonal ritual of blowing the fallen leaves off the track was conducted. Track volunteers included: Jeff Hakner, Paul Davy, Terry Kennedy, Braeden Coughlin, Rob Paradis, Liz & DJ Zelanakas, Barry Frazier, Joe Perrino, Joe Marcarelli, George Papuga, Finn Riordan, Carol Riordan, John DiSarro, Mathew Lyons, Tom Lenhart, Thurston Clark, Antonio Bianco, Phil Christopher, Anthony Bianco, Alex Karnes, Jim Day, Mike Hildreth, John Cox, Dennis Hoyt, Joe Cavanagh, Dana Bowers, Ed Miller, Pete Barrington, Dexter Cheney, Phil Palmieri.

Buildings&Grounds

Renovation of the "shack" continued with all new outlets and lights, including several timers to control holiday light displays, baseboard electric heat, and a new pine board false ceiling. This work was performed primarily by Dana Bowers, Harry Whipple, Joe Cavanagh, Anthony & Antonio Bianco, Mike Hildreth, Clay Emerson and Dan Mongillo. John Aurelius cleaned up the flood-damaged remains of old audio-visual equipment in Barn 1 and did some repainting of the barn 5 doors. Rob Paradis, George Papuga, John Cox and Dennis Hoyt were active in debris removal on the side of Barn 2 and general property cleanup, including the new property acquired in summer 2014.

The deteriorated platform at Short Beach was replaced as an Eagle Scout project by Jacob Sturrock of Branford. Jacob's volunteer squad included his father, Jeffrey, who is a

professional carpenter. Lumber was donated by National Lumber of East Haven through the courtesy of Bill Ryan. We now have a very well constructed, solid and level deck that should serve the museum and the Short Beach community well for decades to come.

Signal

The signal department took a break from power return bonding after completing 84 track. Most of the efforts were then concentrated on re-routing signal and telephone cables in conjunction with the "shack" project. A new junction box area inside Barn 3 has been placed in service and all of these lines now run underground into the shack. A new signal power line has also been extended from Barn 5 towards the loop area which will replace the "temporary" wiring that was installed ca. 1970. An audio-frequency track circuit was adjusted to correct problems with signals 28 and 30. Volunteers: Dana Bowers, Joe Cavanagh, Harry Whipple, Dan Mongillo, Jerry Otrin, John DiSarro.

Line

The wire frog to nowhere (former 21 track) was removed along with associated span wires. A new pole was set near new switch stand 1-B and will be used to support the new wire work leading across Narragansett siding and up to Building 8. Ground anchors and down-guys were renewed in the Edgewood / Narragansett area. In Riverside East curve, new pole 108 was dug and set, ground anchors, guys and spans were renewed. This exhausted our pole inventory but not to worry, thanks to a generous donor who wishes to remain anonymous, another batch of poles arrived in late December and should serve to replace all mainline and yard poles needing attention through 2017. Line volunteers: George Papuga, Dennis Hoyt, John Cox, Joe Cavanagh, John DiSarro, Rodger Ad-dil, Ted Eickmann.

AC Power

The project to bring permanent AC power to

buildings 8 and 9 hit a small snag when the utility company, Eversource (formerly CL&P) requested an additional switch and fuse protection. This was installed by Rich Parente with assistance from Mike Scholl and Jeff Hakner.

Vehicle Collection

NJ Trailer 4584: Ted Eickmann and Bob Yohe completed end sash and corner post repairs. Attention turned to the flooring which had rotted out in certain areas of the car where water had been leaking. These bad sections were cut out and new pieces of southern yellow pine tongue-and-groove flooring were milled and fitted in. New support blocks were also needed under some parts of the floor. A surplus Tomlinson streetcar coupler was disassembled and frozen parts were un-stuck. It is now being painted and prepared for installation. Repairs were made to the pocket and carrier bar which will support it, and the repaired skirt was re-installed. A deteriorated section of letterboard was cut out and a new piece (previously salvaged from a sister car) was prepared to be spliced in.

H&M 503: Al Zelazo continued interior finish work, beadblasting, priming and painting numerous window post caps and scraping, sanding, priming and painting in-place seat dividers and other interior areas. A problem with the head/tail light circuit through the drum switches was diagnosed.

C&LE 116: Paul Hilzen continued cleaning and painting of the luggage racks and bathroom area, and began work on the sash retainers, while Bob Dusel fabricated and installed sign holders.

PATH 745: Conrad Misk, Paul Hilzen and Bob Dusel have cleaned up the car. Areas of peeling paint were scraped and repainted and the side striping was touched up. Missing windows have been installed. The grab irons that were damaged during one of the crane moves were repaired.



Use of electric lifts has made overhead work easier. L: Dana Bowers works at pole 23 stringing signal cables. R: Ted Eickmann at new pole 35½ stringing spans that will support the completed trackless loop and new wire crossing for the Building 8 lead. The low end of the property acquired from Mr. Aspinall in 2014 is in the distance behind a newly-installed bench. (J.Hakner)

Rhode Island 1504: Rob Paradis concluded installation of a plexiglass panel which allows visitors to see the interior of the car while on display. A similar treatment was applied to *New Bedford RPO 302* which allowed its interior to be displayed.

Brooklyn 1792: In support of the flood recovery campaign, Joe Marcarelli received assistance from Mathew Lyons, Mark Papuga, Jackie Rodriguez, Jeff Hakner, Terry Kennedy and Tommy Marcarelli Jr. All bearings were freshly packed. The previously overhauled compressor parts were re-assembled and a cracked casting was repaired by brazing. Air system repairs were required (compressor governor: new piston cup, H-1 emergency valve: clean and lubricate, motor-man's valves: repair seal, safety valve: clean, lap and set).

ConnCo 865: While the car was in the shop having its new axle bearings fitted (these were paid for by a grant from the **W. Russell Rylko Memorial Award**) by master mechanic Denny Pacelli, some unfinished electrical business was taken care of. The light circuits were traced out and missing grounds were located and connected. The buzzer had evidently been out of service since the ConnCo days with three burned-out components. Replacements were located among our spare parts and the buzzer was repaired. A loose terminal in the heater circuit was located and repaired. The car was given a thorough cleaning and a few areas were sanded and spot painted. After several test runs, the new axle bearings seated themselves without much further adjustment and all run cool now. Volunteers: George Papuga, Rodger Addil, Jeff Hakner, Terry Kennedy, Joe Perrino, Adare Ghist.

The motor-alternator unit which converts the 3-phase AC power needed to run the car jacks failed in early December. Jeff Hakner, assisted by Joe Perrino, repaired it — the defective component which kept this 1500# unit from functioning was a 75¢ diode weighing less than an ounce.

ConnCo 500 came into the shop from Building 8. It was lifted using the I-beams so the jacks could clear the protruding belt rail board. The motors have been removed and

sent out to the motor shop. While the car was in the shop, Rob Paradis removed the damaged coupler carrier and associated wooden support blocks, assisted by Al Zelazo and Harry Greenblatt. Jeff Hakner repaired the speedometer and removed the lightning-damaged volt/ammeter for repair.

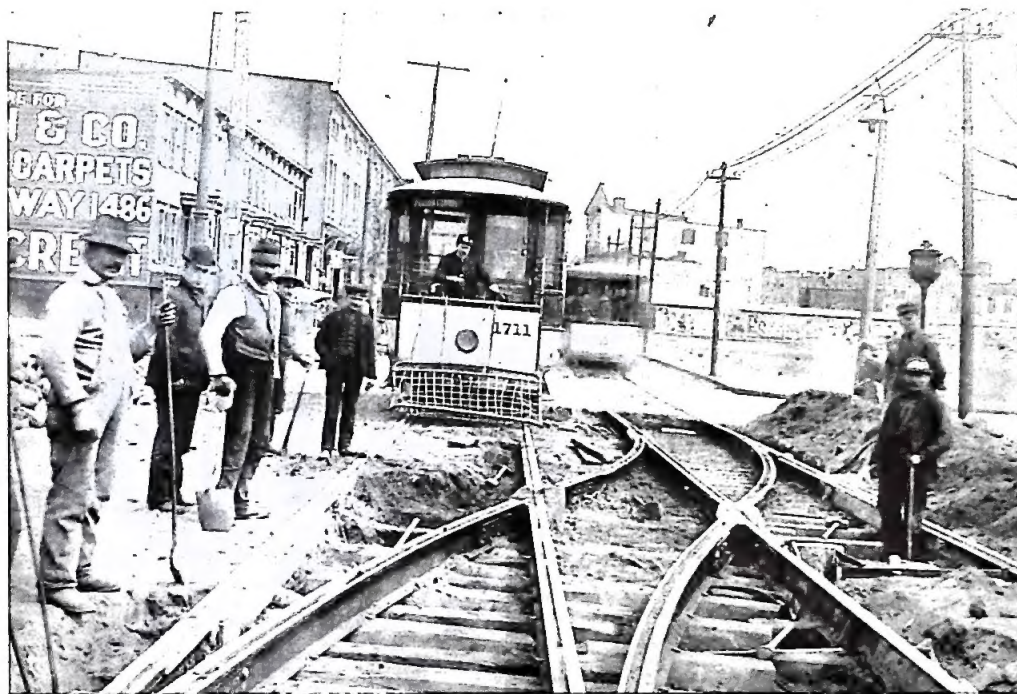
NY horsecar 3: The structure is now complete and pedestals have been mounted to the sills. Hopefully the car will be on its own wheels this spring!

Illumination Department: Jimmy Boylan changed light bulbs on 2001 and 1602.

MID L: Tremendous crowds for Haunted Isle on Oct 17 were representative of strong attendance at all of our Oct-Dec special events. This night set a single-event record of 2,243 visitors, and combined with Pumpkin Patch earlier in the day, our total attendance was over 2,800, with nearly identical numbers the following weekend. Haunted Isle saw 7,147 visitors in total, with 3,088 visitors to the Pumpkin Patch and 5,471 to Santa's Trolley/Winter Wonderland. **TOP R:** Greatly improved holiday displays in Barn 3 were largely the work of Clay Emerson, Mike Hildreth, Anthony Bianco and a cadre of high school interns. Children were able to write a "letter to Santa" and then "mail" it here at the Railway Post Office trolley (#302) which was on display for the first time this year. Additional photos show the scene inside Barn 3 including Santa in car 2898. **BOT R:** Through the magic of infrared photography, this Haunted Isle actor in his "funeral director" scene is seen in almost total darkness. (K. Rosen)



L: The other end of the span wire from page 5 connects to this pole #B-1 alongside the Ave. L platform and Barn 2, with a wide variety of line paraphernalia mounted to it (the new span is attached to the new, dark-colored porcelain strain insulator) **M:** Mat Lyons crawls beneath car 500 to disconnect motor leads. **R:** Denny Pacelli fitting overhauled motors and new bearings to car 865 (in background on jacks). (J Hakner)



#1711 - 1704

1905

Car 1711 was similar to 1792 and was also built in 1899, but by St. Louis Car Co. It is on the Putnam Ave line heading west towards Fulton Ferry, April 4, 1905, at Saratoga Ave. & Halsey St., slowing for a gang working on the girder rail crossover track. Note the feeder cables strung on the top of the line poles on the right, and the independent pole holding up a carbon-arc street lamp at the corner. This is the 1700 series' initial configuration with open platform, cream colored dash, basket type fender (which was carried from end to end as seen in the fleeting image of 1704 going the other direction) and hand brakes (which the motorman is cranking up). (Edward B. Watson / Arthur J. Lonto coll., courtesy New York Transit Museum ID#2010_20_1_6_209)

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and/or leasing of practically every street railway and rapid transit line in Brooklyn, with some routes reaching into Queens and Manhattan. The BRT obtained a majority stock control of the Nassau Electric R.R. by February 1899, owning all of the common stock and 63,644 of the 65,000 total preferred stock shares.

It was the BRT's practice to retain the corporate existence of acquired lines for various tax, accounting, regulatory and stock manipulation reasons. BRT directors were installed on the boards of all these "paper companies" and it was, for all intents and purposes, operated as a single unified system. The complex corporate structure made the receivership and reorganization of the BRT starting in 1919 a difficult one to follow and had unanticipated negative results for the riding public, such as the seemingly arbitrary severing of routes and elimination of free transfers.

A curious article in the *Brooklyn Daily Eagle* of April 4th, 1899 informs us that Mr. Flynn, still a minority stockholder in the NERR, filed a lawsuit objecting to the terms of a lease-back agreement wherein the property and franchises of the NERR were leased to the Brooklyn Heights Railroad Co. (which was also controlled by the BRT). This suit was apparently not successful, for on April 3rd, 1900, the BHRR executed a 999 year lease of the NERR. On June 30th, 1904, in an attempt to circumvent a court order requiring free transfers from one leased line to another within the BHRR umbrella, the BRT caused the directors of the NEER and the BHRR to mutually terminate this lease and the Nassau road was again, on paper, an independently operated company.

Delivery

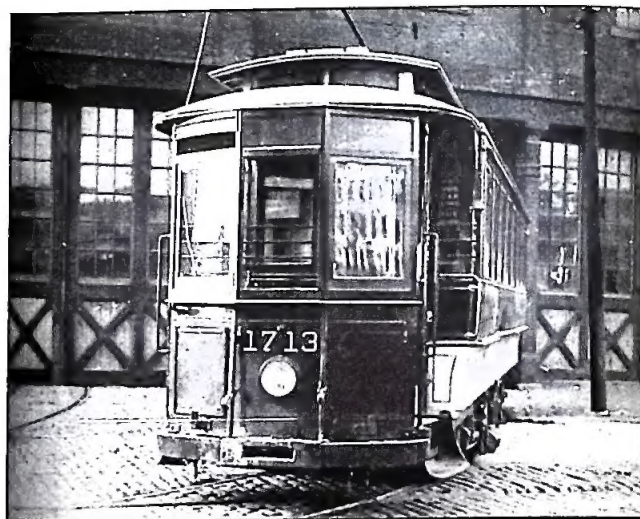
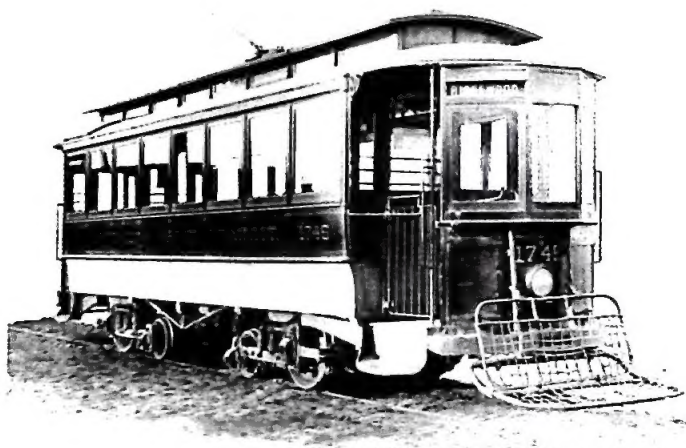
The Nassau company had been ordering its own rolling stock. According to an 1897 survey appearing in *American Street Railway Investments*, the builders were Brill, St. Louis, Stephenson and Brownell. One specimen survives: car 169 in the collection

of the Connecticut Trolley Museum (Warehouse Point), an 1894 single-truck closed car from St. Louis Car Co.

On March 18th, 1899, with the NERR now under BRT control, an order for 50 cars numbered 1750-1799 was placed with the Laclede Car Company located in St. Louis. Laclede had been formed in 1883 and was one of three St. Louis area companies that spun off from the Brownell Car Co. (the others being St. Louis Car Co. and American Car Co.) In 1903, Laclede was absorbed by SLCC. According to the books of that company, the order was placed by the BRT and was Laclede order #466. Car 1792 was presumably assembled and delivered sometime that year. It measures 25' over bulkheads, or 35' overall and cost \$1,135 (less traction motors and wiring, which were typically installed at the company's shops during this time period)

Despite being technically owned by the NERR, the car would have been (based on photographic evidence of other BRT cars of this period) prominently lettered "BROOKLYN RAPID TRANSIT" in a two-tone maroon and cream paint scheme. As if to remind dubious authorities that the various paper companies of the BRT really did exist, it was the BRT practice to stencil the initials of the company on the car, usually on the bulkhead, and thus there on 1792 appears "N.E.R.R." Ed Watson's roster notes were unclear on the assignment of the car in its earliest years. It may have originally been owned by the Seaview Railroad and was transferred to the NERR between 1900 and 1908. The car spent most of its passenger career out of Ridgewood Depot and worked lines such as Gates, Myrtle, Wyckoff, Bushwick, Union and Putnam Aves.

1899 was a transitional year in the street railway industry as the single-truck car was being obsoleted by the double-truck design. The former carried two traction motors, and as companies switched to the latter design, having four axles total, not everyone was convinced that it was necessary to also have four



L: Airbrushed company record shot of 1745, ca. 1908 shortly after platform windows were added. (EBW/AJL coll. courtesy NYTM ID#2010_20_7_2)
R: 1713 is in front of Crosstown Depot for another company record shot, also undated, ca. 1909. (EBW/AJL coll. courtesy James Greller)

traction motors, which were expensive major components and required more wiring and upgraded controllers.

A fad which swept over the industry at around this time and lingered into the teens was the "maximum traction" truck. Simply omitting the motors on two axles did not produce a satisfactory result. With only 50% of the car's weight on drivers, it was much more prone to slipping on wet rail. In a maximum traction truck, the motors are mounted on normal-sized axles but the other axle of each truck is a so-called "pony" axle with much smaller wheels. This redistributes the weight so that about 70% is on the driving axles and allows the use of a two-motor, double-truck design. Car 1792 is an example of this (other examples in the museum's collection are Third Avenue 830 & 884,

Connecticut Co. 1802) and as delivered had Brill #22E trucks. These were unusual in that the larger wheels are outboard and the pony wheels are trailing, and rather than a traditional transom and bolster arrangement, the truck relied on a cantilevered pivot support. The replacement with Brill #39E trucks was among several major changes to the car during the course of its service life.

The car's 16 windows are fixed single-sash that can not be opened. During the summer, the BRT like many other companies switched over to open cars. In some cases, a set of trucks was shared between a series of open and closed cars, with the inactive bodies sitting in storage, off their wheels. As built the end platform was open. The Public Service Commission ordered, in



1757 (same Laclede order as 1792) shortly after delivery with freshly-waxed belt rail, at Ridgewood Depot. (EBW/AJL coll. courtesy James Greller)

1750-1799 NE RR BUILT BY LACLEDE CAR CO 1899

1908, that some protection be provided for the motormen against the winter elements. The BRT complied, and over the next few years, the fleet was modernized by fitting bay windows on the ends. The platform sides remained open, protected only by folding gates. Ca. 1914, air brakes were added (using the same type of equipment as is found on car 4573), the trucks were changed, and the original large, detachable fender was replaced with a modern under-car lifeguard with tripping bar.

The New York & Long Island Traction

Car 1792 is the only surviving streetcar documented to have operated in service within Nassau county (there are no known survivors from Suffolk County, whereas New York, Kings, Queens, Richmond, Bronx and Westchester counties are all represented in various museum collections) as a result of its brief lease to the New York and Long Island Traction Co. The history of this company is told in a 1952 self-published booklet by the late Vincent Seyfried. Since physical copies of this work are somewhat rare (however, both it and the companion volume on the Long Island Elec. Ry. are now available online from archive.org), a synopsis is interpolated into this article.

The company was incorporated on February 27th, 1899 as the Mineola, Hempstead & Freeport Traction Co. and secured a franchise to build the north-south route between its namesake villages. The epicenter of the system was Main & Front Streets, Hempstead. Because of various political issues and legal battles with rivals and abutting property owners, it was not until May 15th, 1902 that service began on a portion of the line. ca. Sep. 1901 the company's founders had been bought out by investors associated with the Cleveland Construction Company, which had the contract to build the line. Additional franchises had been secured, including a route into Jamaica, Queens, and thus on September 22nd, 1902 the name of the company was changed to the New York and Long Island Traction Co.

Three additional east-west routes were constructed. The Hempstead Turnpike line began in Hempstead and followed that route (present-day NY24) through Franklin Square and Elmont to Belmont Park. Trackage rights over the Long Island Electric Ry. (after 1906) allowed the NY&LIT cars to run via Jamaica Ave. to the heart of the downtown Jamaica business district at 160th (formerly Washington) St.

The Southern Division followed the general path of present-day NY27 (Sunrise Highway and Conduit Blvd.) from Freeport through Rockville Centre, Lynbrook and Valley Stream into Queens County, through Rosedale, Laurelton, Springfield and then via present-day Rockaway Blvd. (formerly the Rockaway Plank Road or Turnpike) and present-day 101st Ave (formerly Jerome Ave or Broadway) where the line terminated at the "City Line" (the old Brooklyn city limits) station of the BRT's Fulton St. / Liberty Ave. El line at Grant Ave.

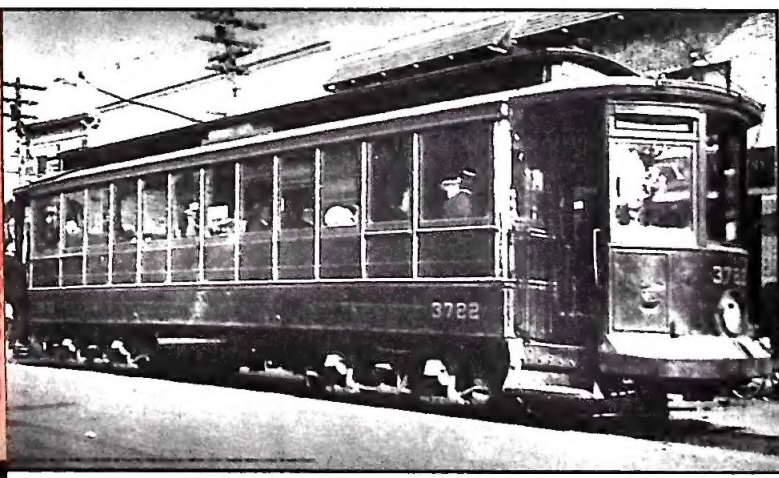
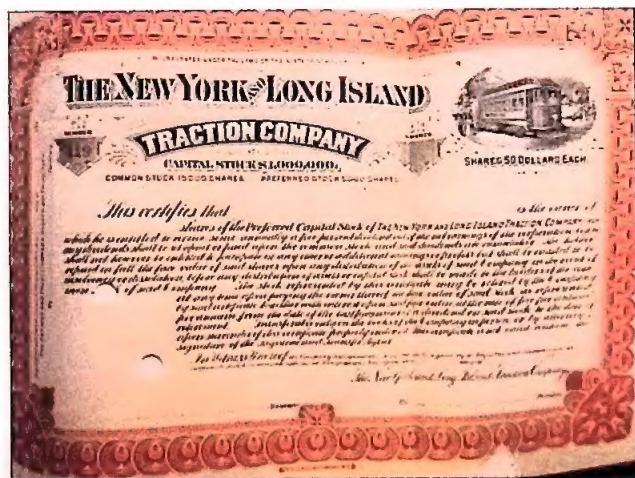
The Jericho Turnpike line came out of Mineola and headed west through New Hyde Park and Queens Village to the intersection of the Hempstead and Jericho Turnpikes (present-day Hempstead and Jamaica Avenues) at 212th Place.

The passenger rolling stock was ordered mostly between 1901 and 1906, a total of 30 cars, with 6 more cars added in 1915. Cars were typical suburban type closed cars similar in concept to Connecticut Company cars such as 775 and 865. The company observed a common practice or superstition in numbering cars: the cars were 1-73, all odd numbers (odd for closed cars, even for open cars, of which the company had none) and of course #13 was skipped.

The NY&LIT had just one powerhouse, in Rockville Centre and just one car barn, at Main and High Streets in Hempstead. The latter could hold only 16 cars. The additional cars were stored outside, primarily at the Rockville Centre yard adjacent to the power plant.

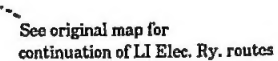
The early years of the NY&LIT found it at odds with the Long Island R.R., which it had to cross at numerous locations. Acting on the premise of public safety but much more likely trying to suppress a rival that might siphon off local passengers, the LIRR fought the NY&LIT extensively in the courts and in front of the various commissions and town boards. This caused the NY&LIT to incur large expenses in making grade-separated crossings of the LIRR.

The LIRR may have regretted its earlier actions, for in 1905, a syndicate lead by August Belmont but acting via straw-men to disguise its true nature, purchased control of the NY&LIT on behalf of the Interborough Rapid Transit Co. (operator of the *continued pg. 12*



L: A certificate of preferred stock of the NY&LIT Co. (from the minute books of the company, NYPL (see ref. notes)) R: The best shot of a BRT car in service on NY&LIT but not a 1700 series. Car 3722 is at Front & Main in Hempstead in 1922. (EBWIAJL coll. courtesy James Greller)

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from pg. 9

original NY City subway lines) and the Long Island Consolidated Electric Co., a subsidiary of the LIRR. This IRT-LIRR combine also controlled the New York & Queens County Ry. and the Long Island Elec. Ry. The three companies had several points of trackage interconnection and were able to share equipment, although each continued to be operated as a separate corporation with its own crews, shops and managers.

Minutes of the Board Meetings indicate they were generally held at the IRT offices at 165 Broadway, New York, and that men very much associated with the IRT, such as August Belmont and Frank Hedley, were on the Board. This arrangement continued until almost the end of the NY&LIT. In 1922, with the IRT in receivership, it was ordered to divest its interest. Thereafter, the NY&LIT was owned solely by the LIRR, the IRT men left the board, and meetings were held at LIRR offices. The minute books thus wound up as part of the corporate records of the Penn Central (the Penn. R.R. owned the LIRR).

Traction power was initially converted from local utility power, then furnished from the Rockville Centre plant, then in later years power was increasingly supplied by LIRR substations. The power plant fell into disrepair and was decommissioned and scrapped in 1920.

Seyfried indicates that most heavy maintenance was done at the NY&QC shop in Woodside, Queens. There are indications in the minute books of the NY&LIT that at least common running repairs could be performed in Hempstead: in 1911, the Board of Directors authorized expenditures for a bearing babbitt device, an air hoist, and a commutator truing machine.

Seyfried also lays at the feet of one Mr. Stoddard, an incompetent superintendent of the system who obtained his post in 1916 through nepotism, the heavy burden of blame for the ultimate failure of the system. Surely this can not be sustained. The NY&LIT had the same problems as many other suburban routes: it ran relatively long distances between population centers and was limited in the fare it could charge. The Nassau County of the teens and twenties bore little resemblance to present-day conditions. Much of it was still farmland. During its last profitable year, 1915, the company earned only 40¢ / car mile. Against that with the costs of wages, power, car maintenance and track/line maintenance, there was not sufficient money left over to pay the debt service. The company began to pile up interest arrears on the \$1,000,000 first-mortgage 4½% bonds that had been used to finance the construction of the line. These 40-year bonds would be due on November 1, 1942.

Leased Cars

Stoddard did not help the situation however, and seemed unable to take any action as the system fell apart around him. By 1920, lack of car maintenance started impacting the ability to make service, and public opinion of the company plummeted. It is at this point that the sad story of the NY&LIT intersects that of our car 1792. In June 1920, the NY&LIT leased three 1905-vintage Brill convertibles from the BRT's Brooklyn, Queens County & Suburban (nos. 3722, 3734, 3735), similar to car 4573 in our museum's collection. These were returned by June 1921. Sometime between then and 1922, the BRT began sending over eight-window closed cars of 1896-1899 vintage. The following cars were in service on the NY&LIT at various times from 1922

through 1924: 508, 518, 579, 710, 723, 1702, 1706, 1710, 1720, 1723, 1725, 1726, 1733, 1737, 1744, 1756, 1759, 1760, 1761, 1762, 1763, 1765, 1781, 1788, 1789, 1790, 1792, 1793, 1794, 1795, 1798, 2100, 2110, 2154, 2190, 2191, 2198.

These cars were available because they had been obsoleted on the Brooklyn system by the arrival of 7000-series Birney cars and 8000-series Peter Witt style cars, such as car 8111 in the museum's collection. By this time, the Brooklyn cars were painted in a solid maroon with cream trim, no striping, with the BRT logo in the center of the side of the car and the car number at each corner and on the dash above the headlight. Surviving photos of the leased BRT cars on the NY&LIT are rare and poorly reproduced, however one photo shows 3722 running as-is in BRT configuration. Did they even bother to change the route and destination signs? The NY&LIT native livery was dark green with some gold striping and the number in the center of the belt rail. The name of the company never appeared on the cars. It would appear that nothing beyond very light maintenance of the BRT cars took place in Hempstead. The cars were cycled through periodically as they needed more major repairs. At the peak of the leasing program in 1923, 19 BRT cars were active on the NY&LIT. The BRT received \$7 per day per car.

Disaster in Hempstead

The Board Minutes of February 13th, 1904 mention that the Board authorized a small expense for the installation of a fire alarm at the Hempstead car barn. Perhaps it was never installed, or it did not function. At 3:40 AM on the morning of February 18th, 1923, a passer-by turned a report of a fire. Cold temperatures and high winds made it difficult to battle, and while company officials attempted to run the cars out of the barn to safety, the fire department ordered the 600-volt power turned off so it could fight the blaze, which threatened the adjacent church.

The barn was destroyed and 14 cars: 9, 21, 27 and 67 were the company's own rolling stock, while BRT 518, 710, 1759, 1760 and 2110 were also burned, along with car 5 which was owned by the (Williamsburg) Bridge Operating Co. and sub-leased from the L.I. Elec, and cars 321 and 330 which were on loan from the NY&QC. The remaining two damaged cars were a line car and a flat car. The BRT received compensation of \$2,420.17 for each of the cars that were lost in the fire.

There were two more fires. On February 28th, a fire at the Rockville Centre storage tracks damaged passenger cars 3 and 27 along with several pieces of work equipment, and there was another fire reported at "Oceanside" on March 29th. The possibility of arson was not mentioned but one has to wonder. The total insurance settlement for these three events was \$36,000, according to the Board minutes. The money was insufficient to replace the cars or rebuild the barn. Instead, the company purchased second-hand cars. A batch of ten, 15-bench open cars from Third Avenue Ry. (numbered in the 1500 series) was not used on the NY&LIT, which never ran open cars, but immediately leased to the Long Island Electric, which did. Another batch of ten Birneys came from Eastern Mass. St. Ry. They were from the 5100 series, but wore 100-109 on the NY&LIT. These arrived in August 1923 and, along with the surviving serviceable original cars, held down service until abandonment in 1926.

The BRT cars were not used after the 1924 season. Seyfried's



TOP L: 9730 leaving Dekalb shop for the museum on Nov 8, 1950. The dash indicates that the car is "reserved for Branford" (EBW/AJL coll. courtesy NYTM ID#2010_20_1_39_127) TOP R: 9703 was a smaller, single-truck sand car. This rare interior view gives an idea of what would be found inside. (EBW/AJL coll. courtesy James Greller) BOT L: Coming to Branford, Nov 8, 1950, on US1 in Pelham. Third Ave. streetcar 324 behind it is still in regular service. (Robert Presbrey/BERA Library #P18) BOT R: 1792, partially back-dated to its earlier appearance, seems to be running under its own power as it turns around on the museum's main line near the start of Riverside curve, with the newly-arrived Montreal Shunter behind it. (EBW/AJL coll. courtesy NYTM ID#2010_20_1_6_259)



roster and Ed Watson's roster indicate that 1792 was leased during a portion of 1923 only, arriving on May 21st. While some popular accounts of the car's history say that it went to the NY&LIT because of the barn fire, clearly the leasing of BRT 8-window cars was ongoing.

The End of the Line for NY&LIT

New management took over in February 1923 as General Lincoln Andrews came in as General Manager. His team was progressive and did make improvements that at least temporarily reversed the company's fortunes. The company entered receivership in December 1923. The receivers and General Andrews made every effort to preserve it as a trolley line. However, the weight of the debt service and the deferred maintenance was too much. By 1925, the company was no longer talking about trolley service, but rather how they could convert their franchises to bus operation. Even this did not take place. On February 25th 1926, the property was sold at bankruptcy auction to a scrap dealer after the Cleveland Union Trust Co. foreclosed on the \$1 million mortgage. At midnight on Sunday, April 4th, 1926, trolley service was ended. Contrary to some present-day popular accounts of crews simply abandoning their cars en-route, it was an orderly shut-down.

Even if the receivers had managed to re-finance the debt and prolong trolley service, it is doubtful that the line would have survived the Great Depression. Only a few remnants existed in 1952 when Seyfried wrote the line's history. Today, even less survives. Imagine though the ridership that such a system would have in today's congested Nassau and Queens Counties!

Back in Brooklyn

It was normal for transit companies to maximize their assets by converting cars that were obsolete for passenger service to other purposes. In this manner, a number of very old cars have survived into museum preservation. Sometimes, obsolete cars were sold to other railways, perhaps those that needed a cheap car to fill in a lightly-used line. For example, Third Ave. bought 7 cars of this 1700-1799 series and modified them for use on its Steinway Lines subsidiary in Queens. Most of the remaining cars were scrapped between 1925 and 1931.

1792 survived as a sand car and was converted on December 31st, 1925 for a cost of \$335. Its new number was 9730. Three other cars from this series were also converted: 1755(9728), 1778(9729), 1744(9750). The seats were ripped out and

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TOP: Interior view of car 1713, taken ca. 1909. This photo, from which the interior restoration was based, is the only known photo of the interior of a 1700 series car, although this is a St. Louis rather than a Laclede. Therefore certain minor details may have been different. It was on the photo that the interior restoration was based. Compare with car 786 (BOT L), another 8-window closed car built in 1898 by Stephenson. The off-center location of the bulkhead door, the odd dividers between the bench seats, and the arm rest are nearly identical, though there are differences in the raised panel work details. BOT R: 1774, sister car to 1792, is on the West End line on New Utrecht Ave. crossing 39th Street (and the Church Ave. trolley line) in 1918. A few years earlier, the West End tracks were shared by trolleys and rapid transit 'el' trains (such as 1227, 1349, 659, etc. in the museum's collection) operating under the wire. (EBW/AJL coll. courtesy James Greller) MID: Completed interior of 1792. (J. Hakner)



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replaced with bins for holding sand. A hole was cut in the roof to allow for rapid loading of the bins. The windows were boarded over. The entire car was painted a solid, light brown (standard for work equipment) with the number in white at the side center and center of dash. A few components such as the air governor (WABCO type "G") and H-1 emergency valve were relocated from under the seats to other locations in the car. The car was now used to deliver sand (most likely from the Canarsie sand pit) to the various depots, and/or to work with the snowplows to sand the rails. The car worked out of Bergen St. depot and later Canarsie depot.

Preservation at Branford

The "Brooklyn Car Saving Committee" consisted of early Branford members Ed Watson, Vincent Seyfried, Bob Presbrey and Al Hirsch. They had successfully saved car 4573 and brought it to Branford in 1948. The end was in sight for old work cars such as 9730. Its sister 1700-series cars had been scrapped in 1946-1948. In the summer of 1949, the committee picked 9730 which, according to an article by Al Hirsch in the Sep-Oct 1978 *Branford Electric Railway Journal*, was on "death row" behind Fresh Pond Depot. The car was observed to be in good mechanical condition (further disassembly during motor repair in 2015 confirmed that the bearings and gears had very little wear. Perhaps the car was overhauled when placed into work service?)

Fan trips were operated and movies were shown (Hirsch recalls that they were "not always trolley films" -- the rest is left to the reader's lurid imagination) to raise money to purchase the car (for \$175) and for the move, which took place on November 8th, 1950. An anecdote worth re-telling: after going over the White-stone bridge, the trailer with 9730 aboard was forced to detour through the Ferry Point garbage dump (today the site of a Donald Trump golf course development) to avoid a low bridge. A sanitation officer on duty sternly warned them that "you can't dump that thing in here!"

At Branford, the car was eventually housed and plans were made to restore it to its earlier passenger-car appearance. A target date of 1916 was chosen. This was just before the two-tone paint scheme yielded to solid, and just after the major mechanical changes. Some parts had been acquired from similar cars that had been scrapped. Unfortunately, the interior sand bins and hardware were removed and discarded shortly after the car's arrival, and there are no photographs in the museum's archives of the car's interior condition as received by us. The car was at least partially repainted, but not much more happened until October 1978, when Tom Shade, writing in the *Journal*, described how a gang of volunteers seized the car as a "broom job" project, a job that stretched on for about 6 months. Shade's statement that the car moved for the first time in "25 years" was an exaggeration: a photo shows it operating in 1965.

The car was now presentable and attractive on the outside and was put on display. Lacking an interior, at some point during the 1980s, a Lionel toy train layout was placed inside.

Restoration in 2015

This situation continued until late 2014, when Conrad Misek decided that it would be beneficial to complete the car's interior. The train layout was relocated to Rhode Island 61 (another ancient trolley, re-purposed as a sand car, that lacks an interior) and

construction began. Conrad fabricated the missing interior details based primarily on one published photograph of the interior of car 1713 (pg. 14), and using the salvaged parts from other cars as patterns. He described this as not necessarily a perfect restoration, but one that was designed to make the car presentable and interpretable to the public. He also donated the cost of the materials and supplies.

At the same time, as part of the ongoing flood recovery project, and sponsored in part by a donation from Jimmy Boylan, the car's motors were removed and sent out for overhaul. The flooded air compressor was also removed but since the Sandy claim was not yet open, it was repaired in-house. By late summer 2015, the motors were back from the motor shop and the compressor was done. The car came back into the shop and the components were re-installed fairly easily. Some minor air system repairs were needed, as the car had been sitting for 4 years, and on October 4th we had a successful test run.

Car 1792 was run for the public (albeit museum members) for the first time at the Annual Meeting on November 14th, after which it was placed in safe storage for the winter season in Building 8. Thus a nexus of the motor repair campaign, the Elevating the Collection Campaign, and the enthusiasm and financial support of museum volunteers, has yielded another historic milestone and another success story at the Shore Line Trolley Museum.

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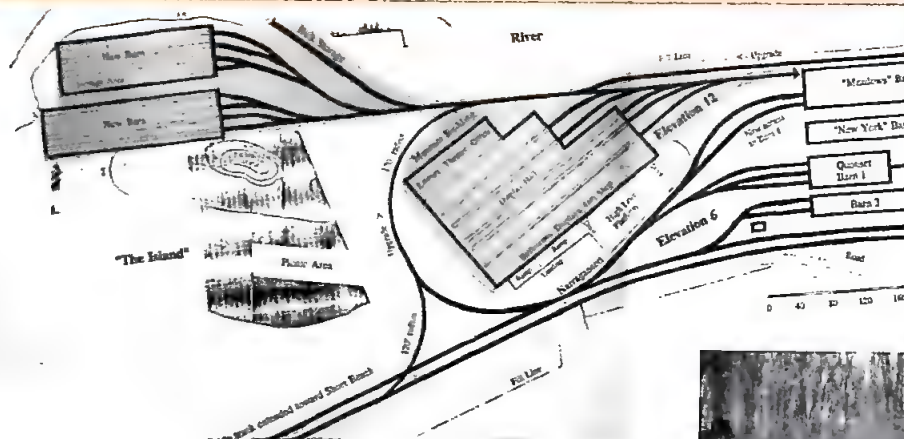
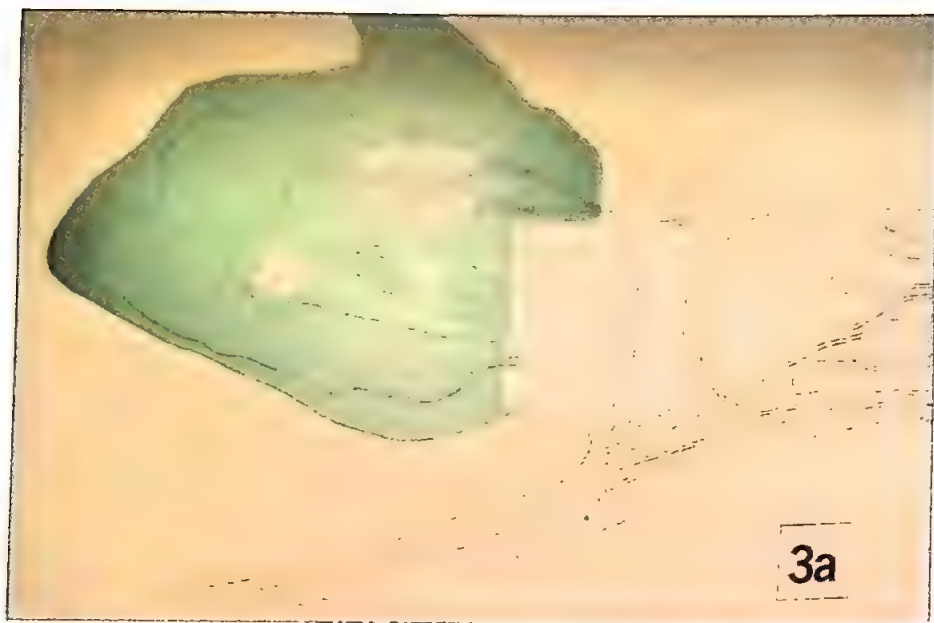
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The 1977 version of the Master Plan placed most of the development on the landfill. Two dead-storage buildings were to be built on the Island and accessed via the "run-around" track (top most track, note connection back to main line via wye). All of this was planned at the existing low elevation. This plan incorporated a transfer table to access the large central barn and one was actually obtained from Boston a few years later but proved impractical to install here. Both this and the plan below would have demolished Barn 2. Almost two decades later, the 1994 Master Plan was similar, but now all the new buildings were to be placed at elevation 12, the 100 year flood line (Elevating the Collection was ultimately built at elevation 14.2, the 500 year flood line). This plan was eventually investigated by an engineering firm and found to be impractical because of the poor soil conditions on the landfill and the abrupt grade changes. BELOW L: By 1983, the runaround had been extended about 150'. The car at the end is 120, the self-propelled Sperry car which was transferred to the collection of the Trolley Museum of New York during that year. Cars 2775 and 1362 are behind it. (BERA Library #P21638) BOT L: Same view, Jan 2016. (J. Hakner) BELOW R: 64 track extension, March 1992. (W.Wall) BOT R: Same view, Jan 2016 (J. Hakner) [It may not seem like it, but ConnCo bus 1261 did in fact move between 1992 and the present!]



from rear page

mainline track at the Loop (which itself had just been constructed in 1970) and re-enter via this run-around route somewhere near Narragansett Junction. Hence the name of the track. This component of the track plan was still present in the original design for Elevating the Collection, but the part about re-joining the mainline was later dropped because the cost did not justify the benefit (and gave us a lot of new track that was still in the flood plain).

The 1970s Master Plan would have placed a number of new buildings in an area behind Barn 2 that was at the time still marsh. To create the land needed, and also to gain access to the "Island" where some buildings were contemplated (and ultimately where Elevating the Collection was constructed) the museum applied for and received permission to fill. Because new regulations were coming into play, the museum had to do this work before October 1977 and this urgency led to debt-based financing with the museum members as the lenders (a strategy that had worked well in 1952 to rescue the museum from its initial fiscal crisis). \$30,000 of 6% interest-bearing 25-year bonds were floated and purchased mostly by members, the cash was raised, and the land was filled in late 1975-early 1976. Over time, many members returned their bonds unredeemed and instead were entitled to a tax deduction.

Part of this landfill created a trackway on the side of Barn 6. Starting in 1975, the Barn 7 and then Barn 6 ladders were built using available salvaged rail. Switch points were made out of short lengths of scrap rail that were taken over to Mackenize Machine Shop in New Haven for milling. Frogs were welded together in our own shop. There was little budget for this at the time. A mixture of 80AS, 78NH and 70AS was used, almost all of it being left-overs from various mainline rail upgrades over the years. By May, 1978, the run-around track was being placed along the edge of the barn, using relay ties spaced 4' apart and well-worn 60AS rail. The late Joe Swaetman, in 1982, put up poles and strung wire as far as a point about 120' beyond the east edge of Barn 6 which is also where the track ended.

In the 1980s, for various economic, political and technical reasons, the Master Plan never evolved beyond the planning stage. The size of the collection continued to grow and there was no place to put it, other than blocking active barn leads or mainline track. The run-around track was incrementally extended during this period, although at times there was optimism expressed about its future role in the master plan. The Nov-Dec 1981 *Journal* proclaimed: "In the near future, we hope to extend the run-around to the Island, which might get people thinking about building a barn out there."

During the next two decades, additional track space pressure came as a spare truck storage track between the shop and Barn 5 was removed to expand the shop to make room for the wheel



(TOP-BOT) Old and now empty run-around track being taken up with the assistance of the Bobcat, late September. Some initial grading of the ramp to the new ladder has taken place. (R. Ryan) By mid-October, grading of the entire run-around and ramp has been completed. (K. Rosen) A few days later, ties and rails have been distributed and are being placed in rough position, with tie plates going between the rail base and ties. (L-r) Paul Davy, Joe Cavanagh, Wayne Sandford. (R. Addit) In mid-November, shortly after the Annual Meeting, the track is completely spiked to within about 50' of the B-94 switch. The first few ties of this switch were not spiked when the inter-museum gang constructed it in April, because the grade wasn't complete yet. The yellow gauge push/puller is lining up the switch prior to spiking, and volunteer Braeden Coughlin uses a pair of jacks to "nip" the ties. (J. Hakner)



Five views of the same location on the (railroad south) side of Barn 6: TOP L: Joe Swaetman standing on the tub of crane W-3, putting up overhead on run-around track, 1982. TOP R: ca. 1985, Bill Young and Bob Rice raising and tamping the track. R: By summer of 1993, weeds have overtaken the area. (BERA Library #P9270/P15681B/P12846, M. Schreiber photos) ABOVE: Volunteers Liz & DJ Zelanakas, Barry Fraizer and Nolan Bath take up the track, Sep. 2015. (R. Ryan) BELOW: Completed track (awaiting ballasting), Nov 2015. (J.Hakner)

lathe, and the size of the collection continued to grow. In March 1992, a second outdoor storage track was put down extending 64 track through the easterly doors of Barn 6 for a length of 380 feet, and the run-around track was extended to parallel this. These tracks were laid to similar "temporary" standards and never had overhead wire. We had gone as far as we could: both of these dead-storage tracks were now at the edge of the wooded, hilly "Island."

The phrase "pulling the run-around" became associated with an almost certainly arduous hostling operation to access cars or spare trucks stored on these tracks. One of these multi-day switch-a-thons took place at the end of 2012, to prepare for the start of Elevating the Collection construction. After cars were re-positioned and many spare trucks were relocated to a new temporary, disconnected track on the side of Barn 5, the run-around track was cut back to a point 180' east of Barn 6, and the 64 extension to about 120'. The land that these tracks had occupied is now buried beneath 6 or more feet of crushed stone that forms the ramp and ladder to Building 9.

The run-around was pulled for one last time by Bill Wall and Paul Davy in September, at the same time that the ATRRM convention was being held one time zone away at Illinois Railway





TOP: Joe Perrino and Phil Palmieri (from Orange Empire Railway Museum) plate up the curve to 93 track, Oct. 2015. MID: Mat Lyons and Braeden Coughlin begin tie layout for 92 track curve. BOT: View from back of Building 9 of nearly completed 93 track, Jan. 2016. The pit is on the left protected with wooden railing. (J. Hakner)

Museum. By the time this author returned, the track was completely clear. The original plan had been to do spot tie replacement and install additional ties as needed, but now without a layer of cars to mask it, the wretched condition of this 30 year old temporary track cried out for complete replacement. The old rails were unspiked and moved off to one side. All of the old ties were pulled up and separated into two piles: re-usable and junk. The roadbed, which was after all just dirt, was badly settled. In all, over 200 tons of stone was purchased and delivered by dump truck. Then Rob Paradis spread and compacted it with his large loader, to restore the level of the roadbed, and to form the remainder of the necessary connecting ramp to the apex of the Building 9 ladder.

Several leaning line poles were put back to plumb and then the ties were put back down by Paul Davy and the Bobcat, with over 150 new ties mixed in with the good old ties, spaced 24" on center. New rail (the same relay 80# rail that makes up the rest of the project) followed, with tie plates used throughout. A new compromise joint was installed to connect this 80AS rail to the 70AS at the corner of Barn 6. The alignment of the run-around track was altered. From a point about 40' east of the east end of Barn 6, the track now takes a gentle (950' radius) curve to the left and ascends a grade of 1% which lines it into the B-94 turnout that forms the junction between the new loop track (yet to be constructed) and the Building 9 ladder. In total, 500' of track was laid, requiring approximately 1000 spikes to be driven (generally with the pneumatic spike hammer), during October and November.

The Rest of Building 9

While this work was underway, taking advantage of the unusually mild November and December, tracks 94 and 92 were advanced. As with track 93, curves connect the ends of the ladder turnouts with the building. Each curve is different, but they all end with a tangent of 20-30' straight into the building to minimize end overhang with larger cars. The radii of these curves run from 90' to 120'. While gentle curves can be built by barring the rail over and spiking (as was the case with the run-around connection) these tighter curves require pre-bending with the "portable" hydraulic rail bender. This unfortunately refers to a cast steel bender frame that weighs over 100 pounds, that is positioned on the rail, then a nice light hydraulic ram (about 30#) is manipulated into the frame and the ram is extended using a hydraulic pump (only 10#). A force of 10,000 - 20,000# is exerted which puts a little kink in the rail. Repeated at one foot intervals, this produces a nice smooth curve that doesn't try to spring back. Jeff Hakner did the curve layout and oversaw the bending.

As of this writing, 94 track has been bent and spiked to about one rail length from the door. The museum has been evaluating bids to fabricate the steelwork needed to carry the rails over the 100' long pit inside 94 track. The pit begins 10' inside the door, so until this work is done, 94 track can not be used. Tie distribution and bending of 92 track has begun and it is about 50' from the door. Meanwhile, tools, supplies and equipment that are being stored in Building 9 have been repositioned to allow construction of 92 and 91 tracks inside. The final turnout of the ladder, 90-91, has been started with tie layout and spacing. The tie order which just arrived also gives us enough to bring 91 track into the building, and to get started on 85 and 90 tracks.

Looking ahead to 2016, at least one additional load of rails and ties will be needed to complete the loop, 85 and 90 tracks. Our overhead line consultant, Art Schwartz, has come back with a design. 23 new wooden poles will need to be set. Because of our FEMA mandate to complete track construction by Spring 2016, this will continue to be the focus. When the tracks are done, overhead line construction can begin.

Elevating the collection photo gallery:
www.bera.org/etc-photos.html

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Elevating the Collection — Bldg. 8 Fully Connected, Bldg. 9 in Service

A major project milestone was reached in early October as ballasting of 84 track was completed and cars were moved inside. This building is now fully connected with all four tracks in service, just under a year after the first track was ceremonially opened at the 2014 Annual Meeting.

Another milestone was reached in early January with the opening of track 93. Bending the rails for the curve leading up to the doorway began in late September. By mid-October, the track had reached the doorway, and we began housing the track tool carts on it. Length by length, ties and rail (stored inside the building) were distributed and spiked down, until the entire interior track was completed in January. After ballasting and leveling, the track was placed in service (as this issue went to press).

The 'ole run-around

In order to reach 93 track, or any part of building 9 for that matter, a major reconstruction of the “run-around” track was required. This track has a long and twisted history. About half of the museum’s barn and yard area prior to Elevating the Collection was filled-in marshland. All of “The Meadows” Barn 6 was constructed on fill in the 1960s by Bruce and Bob Thain, Henry Ruschmeyer and Bill Ketterer, first as an open three-track yard (present-day tracks 61 and 62, plus a track between Barns 4 and 6 that was later removed) and then with the addition of two more tracks and a pole barn enclosure. In the early 1970s, the area to the railroad west of Barn 6 was filled some more, creating room for Barn 7 and the ladder for Barn 6 (which had been on isolated track since construction — the cars were placed there with temporary track).



A bevy of volunteers including some visiting from other museums man-handles a 39' length of rail through the doorway of 93 track, October 2015. (l-r) Phil Christopher, Alex Karnes, Ed Miller, Pete Barrington, John DiSarro, Jeff Hakner, Terry Kennedy. (K. Rosen)

As many of our readers know, Barn 7 was the last building constructed for a period of about four decades, but in this early 1970s period, there were grand “master plans” to further develop the property and construct more buildings to house the collection. All of these plans called for a track alongside (on the railroad south side) Barn 6, and in many of these plans, this track formed part of a “run-around” that allowed one to leave the

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